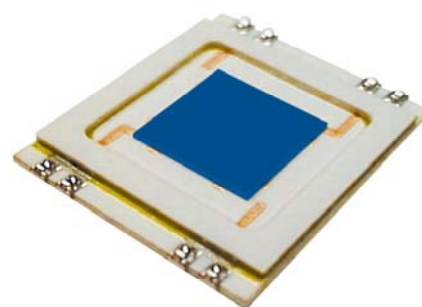


# DL-100-7-KER SMD

## Position Sensing Photodiodes

### Special characteristics:

**dual-axis, duo-lateral PSD**  
**active area 10 x 10 mm**  
**high position resolution and**  
**high linearity**

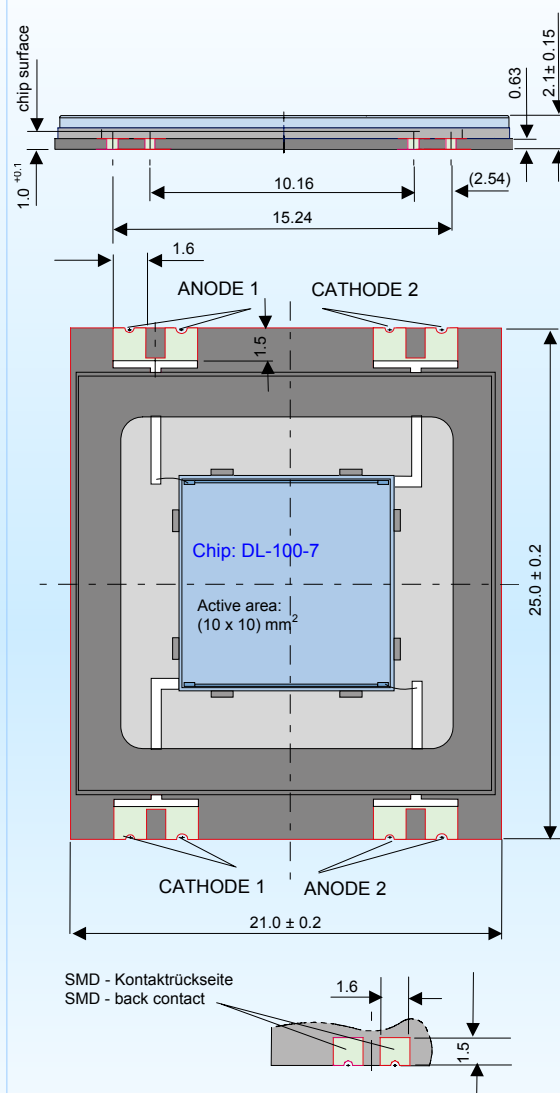


| Parameters:                                         | DL-100-7-KER SMD                  |
|-----------------------------------------------------|-----------------------------------|
| active area                                         | 10 x 10 mm<br>100 mm <sup>2</sup> |
| Dark current<br>at 10 V                             | max. 300 nA<br>typ. 80 nA         |
| Capacitance<br>at 10 V, 100 kHz                     | typ. 75 pF                        |
| Spectral responsivity<br>at 633 nm<br>at 850 nm     | typ. 0,4 A/W<br>typ. 0,62 A/W     |
| Interelectrode resistance<br>at E = 0 lx            | typ. 12 kΩ                        |
| Rise time<br>at 10 V, 50 Ω, 865 nm                  | typ. 4 μs                         |
| Noise limited resolution<br>at 632 nm, 0.5 μW       | 0.2 μm                            |
| Position Detection Error <sup>1)</sup><br>at 632 nm | +/- 1%                            |
| Breakdown voltage                                   | typ. 30 V                         |
| Package                                             | Ceramic S.M.                      |
| Operating temperature                               | -20 ... +70°C                     |
| Storage temperature                                 | -60 ... +100°C                    |

#### 1) measurement conditions:

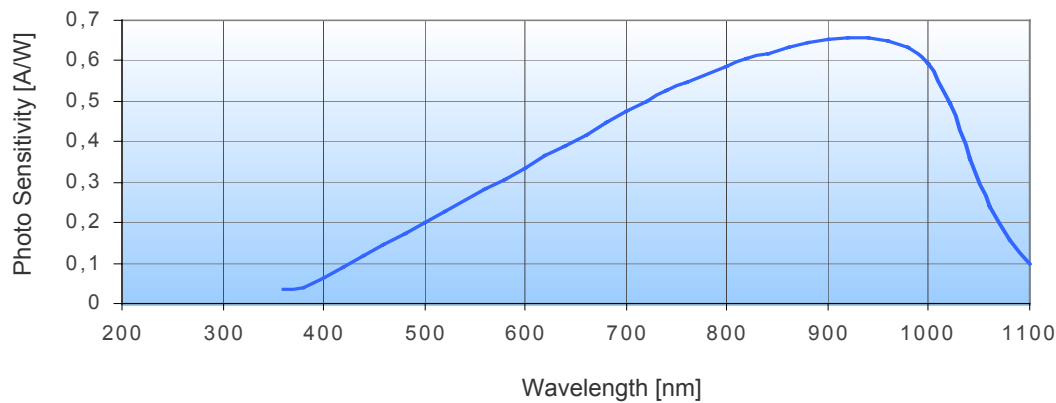
Spot size: 0,5 mm,  
Scan Interval: 1 mm  
Wavelength: 633 nm

### Package 22 (SMD)



## Spectral responsivity (A/W)

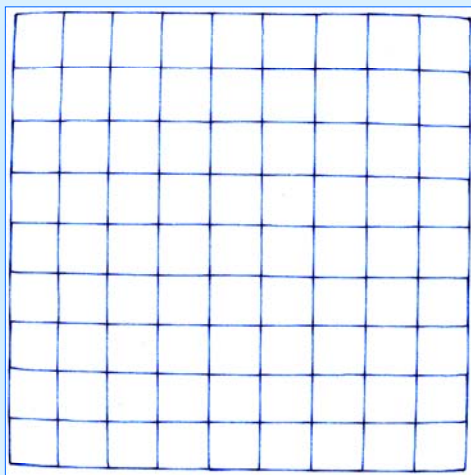
series-7



### Handling precautions

- Soldering temperature 260°C for max. 10 s. The device must be protected against solder flux vapour!
- ESD – protection only small danger for the device. Standard precautionary measures are sufficient.
- Avoid touching the window with fingers!
- Careful cleaning with Ethyl alcohol possible.
- Avoid use of pointed and scratching tools!
- Store devices in conductive foam

### Linearity Plot DL-100-7-KER SMD



(Typical Plot)

- Scan Interval: 1 mm
- Spot: Ø 500 µm
- Wavelength: 633 nm

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